

DEPARTMENT OF TRANSPORTATION
INTER-DEPARTMENTAL MEMORANDUM
DESIGN EXCEPTION REQUESTTo: George M. ClendeninDate: October 28, 2005From: Annette F. AdamsSubject: DESIGN EXCEPTION REQUESTPrepared by: Thomas S. MillerState Project Number: 0609-057-140, B601 Federal Project Number: _____County/City: Mathews District: Fred'burg Funding Source: HBRRPDescription: Appr. and Bridge over Garden Creek Canal* PPMS # 18443* Currently listed in inventory as Winter Haven Canal

Design Exception Request For:

<input type="checkbox"/> Design Speed	<input type="checkbox"/> Horizontal Clearance* (other than "clear zone")	<input type="checkbox"/> Vertical Clearance*
<input checked="" type="checkbox"/> Bridge Width*	<input type="checkbox"/> Horizontal Alignment	<input type="checkbox"/> Vertical Alignment
<input type="checkbox"/> Lane Width	<input type="checkbox"/> Sight Distance	<input type="checkbox"/> Cross Slope
<input type="checkbox"/> Shoulder Width	<input type="checkbox"/> Superelevation	<input type="checkbox"/> Grade
<input type="checkbox"/> Structural Capacity*	<input type="checkbox"/> Interstate Access Control	<input type="checkbox"/> Other

* These are typically requested by the Bridge designer.

Current ADT 138Design ADT 207% Trucks N/ADesign Speed 30Posted Speed NoneReduced Design Speed (if applicable) N/AFunctional Classification Rural LocalMinimum Design Standard GS-4

(GS-4 would require a 22 ft bridge width)

Requested Dimensions 16 ft bridge widthTotal estimated construction cost of project: \$806,000 w/o contingency, CEI, or inflation
(Based on approval of this exception)Additional cost to meet minimum standard: \$61,633

Background description of project:

(Include a description of the general characteristics of the existing highway focusing on the features relevant to the proposed exception. Provide a brief description of the adjacent highway segments, highlighting existing nonstandard features when relevant to the proposed exception.)

This structurally deficient bridge is on a low volume, dead end road. Parcels on the beach side have limited development potential. The existing bridge has 11 ft 6 inch horizontal clearance. The approach pavement, 16 ft. The Board of Supervisors of Mathews County resolved 11/1/01 to request "a single lane bridge." This project is eligible for HBRRP funds and is design build.

Purpose and need for exception, Why standards cannot be met:

(include any future plan to upgrade this exception to standard)

The approaches are bound on both sides by tidal wetlands, a portion of which is DCR conservation land. Additional bridge widening will require increased wetland impacts and right of way. Widening would also require additional investigation of approach settlement.

Accident history for the past 3 years: No accidents

Effect of design exception on safety: The narrower bridge width will restrict traffic to a single lane. Short lines of sight may require traffic stopping to avoid collisions.

Any mitigation of the substandard design element (s): Sign for single lane bridge.

Submitted By: Thomas S. Miller Date October 28, 2005

Remarks: Note that the increased construction cost to meet the minimum standard does not include the additional cost of right of way or wetlands mitigation.

Recommended for Approval By: _____ Date _____

Remarks: _____

VDOT Approval By: NA. Date: _____
State Location and Design Engineer

VDOT Approval By: Signature on file at VDOT Date: 11-4-2005
State Structure and Bridge Engineer

FHWA Approval By: NA. Date _____

Remarks: _____
